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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,499	10/23/2001	Assaf Zeira	P-181-3 US	3946

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EXAMINER

TRAN, DENISE

ART UNIT	PAPER NUMBER
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2189

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/047,499

Applicant(s)

ZEIRA ET AL

Examiner

Denise Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 February 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,5-8 and 10-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-17 is/are allowed.
- 6) ☒ Claim(s) 1,5 and 7 is/are rejected.
- 7) ☒ Claim(s) 6 and 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. The applicant's amendment filed 2/16/05 has been considered. Claims 1, 5-8, and 10-17 are presented for examination. Claims 2-4 and 9 have been deleted.
2. Claims 10-17 are allowable over the prior art of record.
3. Claims 6 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Brady, U.S. Patent No. 5,613,139. The rejection are maintained.

As per claim 5, Brady teaches a computer system comprising:

at least two CPUs (e.g., figs.1-2, els. 12 of NO-N1);

a shared memory, which is shared by said at least two CPUs (e.g., fig. 2, el. 23 of N2), at least one shared system resource accessible to said at least two CPUs (e.g., col. 3, lines 55-60), and

said shared memory having therein a resource locking table (e.g., fig. 2, el. 32), comprising memory elements, each of said memory elements designated for being written to by only one of said at least two CPUs (e.g., col. 4, lines 58- to col. 5, line 4; col. 6, lines 20-21), each CPU of said at least two CPUs having a corresponding memory element for each of said at least one shared system resource to which it has access (e.g., col. 4, lines 58- to col. 5, line 4; col. 6, lines 15-25), wherein each of said at least two CPUs is communicatively interconnected with said shared memory and said at least one shared system resource, wherein said resource locking table is operative by each of said at least two CPUs (e.g., figs. 1-2, els. No-N2, 10; 24; and col. 4, lines 58- to col. 5, line 4; col. 6, lines 15-25), and

wherein any of said at least two CPU can read a first collection of memory elements in a single transaction (e.g., col. 4, lines 45-65), said first collection of memory elements corresponding to requests received from said at least two CPUs for one of said at least one shared system resource (col. 4, lines 58- to col. 5, line 4; col. 6, lines 15-25)

As per claim 1, Brady teaches a computer system comprising:

at least two CPUs (e.g., figs.1-2, els. 12 of NO-N1);

a shared memory, which is shared by said at least two CPUs (e.g., fig. 2, el. 23 of N2), and

at least one shared system resource accessible to said at least two CPUs (e.g., col. 3, lines 55-60),

said shared memory having therein a resource locking table (e.g., fig. 2, el. 32), comprising memory elements, each of said memory elements designated for being written to by only one of said at least two CPUs (e.g., col. 4, lines 58- to col. 5, line 4; col. 6, lines 20-21), each CPU of said at least two CPUs having a corresponding memory element for each of said one shared system resource to which it has access (e.g., col. 4, lines 58- to col. 5, line 4; col. 6, lines 15-25),

wherein each of said at least two CPUs is communicatively interconnected with said shared memory and said at least one shared system resource, wherein said resource locking table is operative by each of said CPUs (e.g., figs. 1-2, els. No-N2, 10; 24; and col. 4, lines 58- to col. 5, line 4; col. 6, lines 15-25), and

wherein said communicative interconnection is across a communications bus (e.g., fig 1-2, els. 10, 14) providing a single read operation (i.e., a read and store lock message) capable of atomically reading a collection of said memory elements, said collection comprising at least two memory elements (col. 4, lines 58- to col. 5, line 4; col. 5, lines 45-46; and col. 6, lines 15-25).

As per claim 7, Brady shows a second collection of memory elements corresponds to a group of CPUs (e.g., fig. 4, el. 32, lock words 46 correspond to group requesting nodes or CPUs; col. 4, lines 58- to col. 5, line 4; col. 5, lines 45-46; and col. 6, lines 15-25).

6. Applicant's arguments filed 2/16/05 have been fully considered but they are not persuasive.

7. In the remarks, the applicant argued that Brady disclosed nothing regarding a computer system and method for locking shared resources connected to multiple processors over a PCI bus or over any other communication means, in a method which was implemented in software only; or

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., method, locking shared resources, in a method which was implemented in software only) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Also, The examiner disagreed with the applicant's argument because Brady discloses regarding a computer system for locking at least one shared resource connected to multiple processors over a PCI bus or over any other communication means. In particular, Brady shows at least two CPUs (e.g., figs.1-2, els. 12 of NO-N1); a shared memory, which is shared by said at least two CPUs (e.g., fig. 2, el. 23 of N2), and

at least one shared system resource accessible to said at least two CPUs (e.g., col. 3, lines 55-60),

said shared memory having therein a resource locking table (e.g., fig. 2, el. 32), comprising memory elements, each of said memory elements designated for being written to by only one of said at least two CPUs (e.g., col. 4, lines 58- to col. 5, line 4; col. 6, lines 20-21), each CPU of said at least two CPUs having a corresponding memory element for each of said one shared system resource to which it has access (e.g., col. 4, lines 58- to col. 5, line 4; col. 6, lines 15-25),

wherein each of said at least two CPUs is communicatively interconnected with said shared memory and said at least one shared system resource, wherein said resource locking table is operative by each of said CPUs (e.g., figs. 1-2, els. No-N2, 10; 24; and col. 4, lines 58- to col. 5, line 4; col. 6, lines 15-25), and

wherein said communicative interconnection is across a communications bus (e.g., fig 1-2, els. 10, 14) as recited in the claims.

8. In the remarks, the applicant's argued that Brady neither identically described the invention, nor enabled one skilled in the art to practice it.

The examiner disagreed with the applicant's argument, as the applicant stated in the applicant's remarks filed 2.16/05 page 13, " the decision In Re Marshall . . . , 'To constitute an anticipation, all material elements recited in a claim must be found in one unit of prior art . . . . ' " Since Brady teaches all elements recited in the claims (see the rejections above to the claims), the 102(b) rejection is proper and is maintained.

Also, The applicant's arguments directed to applicant's invention, but not directed to the rejected claim(s). Although the claims are interpreted in light of the specification,

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limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Further more, since Brady enables one of ordinary skilled in the art to practice it, the 102(b) rejection is proper and is maintained.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Denise Tran whose telephone number is (571) 272-4189. The examiner can normally be reached on Monday, Thursday, and Friday from 8:45 a.m. to 5:15 p.m..



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim, can be reached on (571) 272-4182. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Deussen*

DT

4/29/05